THE SELF CONCEPT OF HEARING IMPAIRED PUPILS IN DIFFERENT EDUCATIONAL SETTINGS IN BRITISH COLUMBIA: A PRELIMINARY INVESTIGATION

by

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Joseph Robert McLaughlin
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Abstract

The professional field of the education of hearing impaired children has been inundated by controversy for the past century. The basic area of conflict has been between those advocating education in residential schools and those advocating education in day schools and classes. This leads to the question regarding the type of educational setting which would have the greatest impact on the development of self-concept.

The purpose of this study was to investigate the influence of four different educational settings on the self-concept of hearing impaired pupils in British Columbia.

The responses of a random sample of fifty-seven hearing impaired students and the responses of twenty-three teachers indicated no statistically significant difference in ranked scores on the Coopersmith Self-Esteem Inventory or the McDaniel Self-Concept Scale using a nonparametric ANOVA at the alpha=.05 level.

However, there was statistical significance in the correlation between the scores from the Coopersmith and McDaniel. This finding appears to be a function of the restricted or inappropriate interpretations made by the deaf respondents to some of the words in the Coopersmith Self-Esteem Inventory. Consequently, low scores on the test may have represented limitations of understanding of the test items rather than a measure of self-concept as a personality component.

In conclusion, this study shows evidence that there appears to be no statistically significant difference between the
development of the self-concept of the deaf and the types of educational setting in which a student spends twelve years or more of his early life.
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FIGURE 1

The Cascade System of Special Education Service (Deno, 1968)
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In the development of self-concept, hearing impaired students recognize how important significant others are for their proper growth and development. In this view, I am deeply indebted to my family, friends, and colleagues who supported me during my recent studies.

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Chapter I

INTRODUCTION AND BACKGROUND OF THE PROBLEM

I. Education for the Handicapped

When school systems first began providing education for handicapped children, the usual approach was to offer special programs in segregated classrooms or schools. Beginning in the 1960’s, a sequence of events in legislation resulted in the increasing trend away from educating handicapped learners in special classes, and towards integrating or mainstreaming handicapped learners into regular classes for the majority of their school day. The word "mainstreaming" receives wide acceptance and is the most crucial single issue in the education of hearing impaired children today.

The philosophy of mainstreaming, originally articulated with respect to the educably mentally retarded, has been expanded to include all categories of exceptional children (Jones and Murphy, 1972).

The issue of integrating or mainstreaming handicapped children is no longer new. Having first acquired strength in Scandinavian Europe, the movement towards integration of children with special needs into the regular classroom has swept through the Western world. Recent major documents in Canada (CELDIC Report, 1970), the United States (Public Law 94-142, 1975), and the United Kingdom (Warnock Report, 1978) are formal acknowledgements of integration. Already familiar to educators, parents, and the general public in Canada, the movement is advocated by many.

Although the Warnock Report (1978) supports the current
emphasis on integration, it does not advocate the immediate movement of all special children into the educational mainstream. It concludes that integration is unlikely to be successful, and could well be retrogressive without careful planning and a knowledge of the effects of handicaps on the learning characteristics of children.

British Columbia (The Public Schools Act, Section 158 under the Ministry of Education, Science, and Technology), has in recent years substantially increased the number of programs integrating hearing impaired pupils into the regular school system. These changes parallel the greatly increased emphasis that educators in the United States have been stressing on mainstreaming and normalization (Yater, 1973).

Mercer (1974) described mainstreaming as the educational equivalent of normalization, the Scandinavian principle advocating conditions for handicapped persons which approximate a "normal" life situation. The definition offered by Kaufman, Gottlieb, Agard, and Kukic (1975) is widely accepted in North America:

Mainstreaming refers to the temporal, instructional, and social integration of eligible exceptional children with normal peers. It is based on an ongoing individually determined educational needs assessment, requiring clarification of responsibility for coordinated planning and programming by regular and special education administrative, instructional, and support personnel (Pages 40-41).

This definition contains three major components--integration, educational planning and programming, and clarification of responsibility. If all three elements must be present in order for a program to qualify as mainstreaming, then the existence of a truly mainstreamed program today is doubtful.
The National Institute on Mental Retardation (1978) stated that:

We are currently witnessing major changes in services for handicapped children. With innovations in the area of developmental programming, the potential for promoting the learning of handicapped children has only begun to be explored. With growing philosophical commitment to and evidence of the success of "integration", more personnel now regard the step of including handicapped children within their regular programs a natural part of their responsibility to the community (Page 1).

Equally important, parents, and associations for handicapped children are exploring the same idea. They have become interested in the development of services and are demanding that regular programs accept their children.

These developments in services have been fostered by the belief in the right of handicapped children to grow up and fully participate in the mainstream of society. Thus, society has the obligation to provide handicapped children with the fullest developmental opportunities, alongside and involved with non-handicapped children.

In the 1970's, momentum for the education and integration of the hearing impaired began as a result of court decisions and Congressional legislation. In 1972, (Mills versus the Board of Education of the District of Columbia), a court decision mandated the return of certain handicapped learners to general education. Handicapped children are defined as set forth in 20 United States Code, Section, 1401:

The term "handicapped children" means mentally retarded, hard-of-hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired children who by reason thereof require special education and related services.
Plaintiffs claimed that education must be provided regardless of additional expense and that no individuals could be excluded from the public school system unless adequate alternative educational services were supplied. In addition, it was required that the school system provide an adequate prior hearing and periodic review of the individual's status and progress, as well as adequacy of placement. Provisioning of programs are made through team consultation to place each child into the school program most appropriate to his capabilities and location of his home with consideration of enrollment in a regular school classroom, a special classroom in a regular school, or a special school as a day or residential pupil.

The culmination of court decisions, such as cited above, occurring in more than twenty-seven states has resulted in establishing the principle of civil rights for all handicapped children. In November of 1975, the United States Congress passed the Public Law 94-142 Education for all Handicapped Children Act, requiring that by September 1978, all states must locate and provide a "free and appropriate education" for all handicapped children, with provisions for federal financing of an additional 40% of the state-per-child budget by fiscal year 1982.

De Salle and Ptasnik (1976) stated that:

Across the nation attempts are being made to mainstream hearing impaired children in accordance with the mandates of the courts that all handicapped children be educated in the "least restrictive environment". Unfortunately, "least restrictive environment" is not always defined the same by educators as by courts (Page 533).

Both the Conference of Executives of American Schools for the
Deaf (CEASD, 1977) and the National Association of the Deaf (Garretson, 1977) have argued that the notion of "the least restrictive environment" must refer to the range of services available as well as to their location and delivery.

Figure 1 offers an example of the cascade system of Special Education Services (Deno, 1968). Level one on the table indicates the degree of special assistance utilized. By placing special individuals in an environment without the needed involvement of special support services places the least amount of necessary educational restrictions upon that individual. As each level progresses the educational environment becomes more restrictive as is warranted by individual handicaps. Level ten Hospitals and Treatment Centres--is designed to illustrate the most restrictive kind of environment. Appropriate placement of an individual would indicate that 24 hour care and supervision would best suit his or her needs. While indeed on the scale it appears to be the most restrictive of environments, for the individual it may be the least restrictive environment in which he or she could function appropriately.

A. The Segregated and Integrated Schools Controversy

The professional field of education of hearing impaired children has been divided by controversy for the past century. The basic area of conflict has been between those advocating education in residential schools and those advocating education in day schools and classes.

German History

As early as 1815 in Bavaria, Stephani declared that institutions for the deaf were useless luxuries and attempted to
Figure 1. The cascade system of special education service (Deno, 1968)
educate the deaf in public school settings. In 1821, Graser established a Bavarian based integrated program for the hearing impaired with the assistance of special tutors. Under Graser's influence, all teachers were instructed in education of the deaf for the furthering of integration. While the primary motivation supporting integration was one of economy, mainstreaming—the American breakthrough in education of the hearing impaired—was predated by about 150 years. In 1828, the German Ministry of Education reported:

In the course of ten years it will easily be brought about that in all the provinces of the Kingdom provision will be made for the education of all the unfortunate deaf and dumb (Gordon, 1885, Page 125).

A report by Gordon (1885) indicated that the experiment was a failure and that the prophecy was never fulfilled. By 1858, Moritz Hill concluded that the education of the deaf in an integrated setting was detrimental to the progress of hearing children. The hope of educating the deaf in a day school environment with hearing children was abandoned. Gordon (1885) reported that in 1871 approximately 40% of the deaf in Prussia were educated in integrated settings, and 60% in institutions. By 1881, there were no deaf children being educated in the integrated schools.

French History

Because the early educational settings for the deaf in the United States were heavily influenced by French educators, many Americans tended to believe that education of the deaf originated in France. In actuality, organized efforts to educate the deaf in France were motivated by the work of Spanish educators, begun some 200 years earlier.
Gordon (1885) reported that similar experiments to those attempted in Germany involving integration were tried throughout central and northern Europe with similar results. Concerning the work of Blanchet, Gordon (1885) found that proposals for co-education of the deaf and hearing began in 1836, with two integrated schools opening in Paris in 1848, and ten schools operating by 1850. The Council of Public Education reported in 1855:

This system which receives deaf mutes in their early childhood has the immense advantage of retaining them in the bosoms of their families, and of placing them in schools in the midst of hearing pupils who become their companions in study and in play, and thus form ties of comradeship which can have upon their future only the happiest influence (Gordon, 1885, Page 132).

By 1858, the French Ministry of Education officially endorsed the integrated Blanchet System, only to withdraw its support one year later. By 1882, an estimated 30 pupils remained in the integrated system.

American History

Because the first schools for the deaf in Europe and North America were residential, it has been mistakenly assumed that integration of the deaf with hearing is a new and innovative phenomenon. Little known is the fact that some of the first residential schools were actually established as day programs. In the United States, the New York School and the Pennsylvania School, for example, were begun as day programs (Best, 1943).

The first residential program in the United States began in 1817 with the founding of the Hartford School in Hartford, Connecticut, the fore-runner of residential-type schools to follow. From 1817 with the beginning of the Hartford School to
In the 1860's emerged a "new and innovative" concept in educating the deaf—the day school. As history indicates, this idea was certainly not new but re-emerging in yet another geographic setting. The establishment of the first day school came in 1869 with the Horace Mann School for the Deaf in Boston, Massachusetts.

**Canadian History**

In Eastern Canada, Monseigneur Bourget of the Community of Clerics of St. Viator founded a Catholic school for deaf boys in Montreal, Quebec, in 1868. Three years later, a Catholic school for deaf girls in the same city was started by Sister Marie de Bonsecours, Mother Superior of the Sisters of Charity of Providence. In 1856, a private residential school for the deaf was established in Halifax, Nova Scotia. The Protestant Institute for the Deaf was opened by Joseph MacKay in Montreal, Quebec in 1869. In Ontario, a school was established at Belleville in 1870.

With much eastern influence to the western provinces, a school for the deaf was built in Brampton, Manitoba in 1875, then moved to Winnipeg in 1889. The Vancouver School Board opened a class for deaf children at the Mount Pleasant School in Vancouver, British Columbia, in 1915. C.H. Lawrence of Halifax, also opened a temporarily based school for the deaf five years later in Vancouver, which was moved to a permanent site near Jericho Beach, B.C. This school was operated by the British Columbian Government.
In Regina, Saskatchewan, the school for the deaf was opened in 1915 but closed one year later. It was reopened in 1932.

In Alberta, the provincial school for the deaf was opened in Edmonton in 1956 due to long agitation by the Calgary and Edmonton Associations for the Deaf.

Clarke (1974) reported that:

Thus it can be seen that although educational programs for deaf children have existed in Canada for a little more than 120 years the growth has been somewhat sporadic. In a similar fashion to the United States, the pattern of development has been for the provincial governments to support large residential schools with permissible day enrolment and for school boards to establish smaller but numerous day programs for the hearing impaired at the local level (Page 5).

Leslie (1976) reported that:

The majority of hearing impaired students in Canada are educated in provincial schools for the deaf. These large residential school enrollments are often reflective of the educational placement options open to parents. Provincial governments have provided the necessary support for development of a residential treatment facility. Traditionally, support money for individual hearing impaired students was often difficult to acquire and maintain in public school systems, while the provincial facility presented a centralized, specialized service for the hearing impaired. Hence, large numbers of students were placed in the provincial school because it presented the most appropriate educational program available. Placement of the hearing impaired student in a segregated, often isolated, educational environment and, for many, separation from their family units created some concerns about the psycho-social development of the individual (Page 17).

With the beginning of the day school programs in North America and their subsequent development, the expansion of residential programs has been drastically curtailed. To date, in the United States, there are 472 day classes and schools versus seventy residential programs (American Annals of the Deaf, 1979). In Canada, the statistics rest at fifty-five day classes
The slogan of many day school and day class programs today is that of "integration"—a relative term governed by situation. A large variety of circumstances can lead to many different interpretations of what it means to integrate. For certain groups of hearing impaired children, integration can mean sharing times such as recess and lunch periods with hearing peers, while spending the remainder of the school day in specially segregated classes for the hearing impaired. On a slightly different level, however, a hearing impaired child may integrate into a regular classroom setting for non-academic subjects such as home economics, woodshop, or physical education, yet remain segregated in classrooms for hearing impaired for special assistance with more academic subjects.

On a higher level still, integration can mean the hearing impaired individual spends the majority of the academic and non-academic school day involved in regular classes, with a resource room and resource teacher provided for special assistance when needed. Complete integration exists when the hearing impaired individual is able to function in a regular classroom setting with no special assistance from support services. This is the ultimate goal of integration efforts, and the most difficult to achieve. The support services provided to the student prior to this stage are of vital importance to success. In addition, both the students' own abilities and self-motivation, and parental involvement are significant aspects.

Various reasons for the rapid growth of day class programs
in North America are outlined by Brill (1974) in the following statement:

The growth of many day-class programs throughout the country results from the desires of parents to have their children live at home rather than away at a residential school as well as from their desire to have an entirely oral program for their children, the program deemed best for integrating their children into hearing society (Page 261).

Additional reasons for this expansion are:
i. Day schools have more urban locations and are centrally located.

ii. Day schools are an integral part of the city public school system, which are free, non-denominational and without restriction as to entrance.

iii. Many of the day schools provide bus services, at taxpayers' expense, to transport pupils to and from schools.

Day schools certainly appear to offer some real advantages and these can be summarized as follows:
i. The child attending a day school does not become "institutionalized".

ii. The child is able to live a normal home-life; to develop a more favorable attitude toward life, and to experience the warmth and affection of family life.

iii. The day school may be co-ordinated with, or a part of, the state educational system. Deaf children come here to feel their place in the normal world.

iv. A close relationship between the schools and the parents can be kept regarding the progress of the child, promoting an understanding between the home and the school (Fauar, 1933).

v. The child is the responsibility of his parents and should
remain at home as do other children.

vi. There is an opportunity to integrate some of the activities of the deaf child with those of hearing children; in future life he will, after all, be living in a hearing world (Kirk, 1972).

It would be misleading, however to conclude that there is no place for residential schools. They have a distinguished history (Justman and Moskowitz, 1957) with some advantages listed below:

i. The child comes under trained supervision at all times.

ii. The child is happier, living with children of the same type and being part of a group.

iii. The residential school is better equipped for industrial training than the day school.

iv. The residential school may provide the child with a better home than his own.

v. The child may be overprotected at home, but in a dormitory he has to cooperate with other children and accept responsibility.

vi. In a residential school with more children, children can be grouped according to age, ability, and interests in a more effective manner than is done in day schools.

vii. Deaf pupils become inspired by the presence of well-educated deaf teachers to model. In the majority of day school programs, there are no deaf teachers.

Katz, Mathis and Merill (1974) stated that:

Nevertheless, it is important for that child to be exposed to deaf teachers, even in a public school environment, for several reasons:

i. A deaf teacher understands the nature of this severely handicapping condition better than a hearing
person, for he must cope with it daily.

ii. It is vitally important for a deaf child to be exposed to a successful model, a deaf person who has achieved professional status, and

iii. Because of free and easy communication, a deaf teacher and a deaf child can identify with each other, permitting the deaf teacher to motivate the child in a more natural and effective way (Page 51).

Brill (1978) claims:

If, as is claimed, the major role of a teacher is to serve as a model that deaf pupils may emulate, there are not many models in the mainstreaming programs. This is particularly true because in any particular system the teachers are spread over a number of different schools (Page 142).

Holcomb and Cockett (1975) outlined some pros and cons of mainstreaming:

PROS:

i. There are many different kinds of mainstreaming. One or more kinds can be found for many hearing impaired children.

ii. Hearing impaired children must live with the world at large sooner or later. Why not teach the children and give them this opportunity while they are in school? If the schools do not, who will?

iii. The hearing impaired child has the same intelligence as the population at large. With the proper supporting services and Total Communication he should have a good chance of being mainstreamed successfully in many things.

iv. Today people are more understanding of the hearing impaired. The hearing impaired child no longer has to make all of the adjustments as many hearing people now know the language of signs and fingerspelling and many others are willing to learn it. Many school curricula now offer the language of signs as an elective either extra-curricular or for credit. People today know how to communicate better with the hearing impaired.

v. The more exposure the hearing impaired student has to learning, the more likely he is to learn. Mainstreaming can provide the hearing impaired child with many opportunities which he would otherwise not have.
vi. The more hearing people are exposed to the hearing impaired the more friends the latter are likely to have in later life.

CONS:

i. Classes for hearing children are too large.

ii. The pace of hearing children is too fast.

iii. There is not enough understanding and empathy for the hearing impaired child.

iv. The communication and language problems are too great for the hearing impaired children to overcome.

v. There are never enough supporting services to justify mainstreaming.

vi. It is too expensive to be done properly (Page 14).

Brill (1974) points out:

A major criticism of residential schools was that enrollment in a school did not prepare the deaf child for life in a hearing world (Page 264).

This especially is the biggest criticism of segregation.

Many educators of the deaf have expressed reservations concerning the desirability of mainstreaming because of past systems that have "integrated" deaf children, but failed to provide them with necessary support services (Brill, 1975; Vernon, 1975; Vernon and Prickett, 1976). A lack of special attention to curriculum modifications, social-emotional development, or sensitivity of teachers to the needs of the hearing impaired account for the past failure of mainstreaming. It is of vital importance to consider more aspects of each individual involved than solely academic.

Mainstreaming should be made available as an appropriate form of education for some hearing impaired children, but certainly not all. Program placement must be made carefully and
individually. Historically, mainstreaming has proven unsuccessful due to a lack of appropriate support services available for assistance. Measures must be taken to avoid this at all costs. Should a system fail, it is the student who suffers as a result. With appropriate support, system failure need not occur.

Residential settings, however, should not be downgraded, or considered inferior to integrated programs. They exist as an alternate means of education for special individuals, and depend also a great deal upon appropriate and adequate support services to meet the needs of their students.

Whether to send a child to a day school or to a residential school for the deaf depends upon many factors. Should adequate provisions exist in the community, a day school may be the best solution. If, however, there are few deaf children in the community and no facility to educate them, a residential school may provide the best overall education. Therefore, realistically, the question is not whether day schools are more effective than residential schools, or vice versa, but rather, what is most beneficial for a particular community and individual. The decision is one that the parents of hearing impaired children must make.

B. Segregation and Integration in B.C. Schools

In recent years much controversy has arisen concerning the present educational systems throughout British Columbia. Most educational jurisdictions in British Columbia have moved quickly towards the servicing of hearing impaired children in integrated settings. This movement is reflected in Table 1 which
describes the various types of educational programs in B.C. And their relative importance.

Clarke (1977) indicates that:

Of the students attending regular elementary, 28 percent were enrolled in classes for the hearing impaired; an additional 5.6 percent were registered in other special classes. In contrast, only 2.6 percent of the students attending secondary school were enrolled in a home-room for the hearing impaired, while 9.8 percent were registered in other special classes. Slightly more than one third of the students registered at Jericho Hill were enrolled in an off-campus home-room (Page 12).
Table 1
Number and Percentage Distribution of Hearing Impaired Students by Type of Homeroom within School Type
British Columbia 1976-77

<table>
<thead>
<tr>
<th>School Type</th>
<th>Regular</th>
<th>Class for Hearing Impaired</th>
<th>Off-Campus Jericho Hill</th>
<th>Other Special Class</th>
<th>Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-school</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>25.0</td>
<td>3</td>
<td>75.0</td>
</tr>
<tr>
<td>Regular elementary</td>
<td>236</td>
<td>66.3</td>
<td>100</td>
<td>28.1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Regular secondary</td>
<td>98</td>
<td>86.0</td>
<td>3</td>
<td>2.6</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Jericho Hill</td>
<td>0</td>
<td>0.0</td>
<td>121</td>
<td>65.8</td>
<td>63</td>
<td>34.2</td>
</tr>
<tr>
<td>V.O.C.</td>
<td>0</td>
<td>0.0</td>
<td>16</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other Special Schools</td>
<td>4</td>
<td>18.2</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>At Home</td>
<td>3(0.4%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing data</td>
<td>0(0.0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Clarke, et al., 1977)
C. The Impact of Segregation and Integration on Self Concept

It is not difficult to illustrate a case for the fact that an educational setting will have an impact upon self-concept development. It is more difficult, however, to predict what kind of effect the educational setting will produce. The move towards mainstreaming and integration reflects the belief that handicapped children need to "normalize" their educational experience in order to ensure adequate self-concept development. From this perspective the special school has more stigma because of the negative attitudes of society toward the disabled. Group integration (Classes for the hearing impaired) has less stigma because the special class is situated in a normal school and thus is perceived more positively. Integration within a regular classroom appears to be the most desirable of educational settings because children have the opportunity to take part in regular school activities. Saifaty and Katz (1976) stated that:

Association with one of these settings is believed to have a different influence on the self concept of the pupil. The more positive the attitude of society to the educational setting, the more positive the self-concept of the child will be (Page 438).

These results provoked considerable professional debate centered around the issue of whether it is better to segregate children in special classes where they may be socially accepted by other handicapped pupils or to integrate the handicapped child with normal peers in regular classrooms where they tend to be socially rejected. Proponents of the latter position have argued that integration with normal peers is preferable because mildly handicapped youngsters will, after all, have to live in the mainstream of nonhandicapped society as adults.
On the other hand, supporters of the special class movement have contended that social rejection impedes the handicapped child's development in attaining adaptive skills necessary for successful adjustment in adult life. Hence, it has been held that segregated special classes protect the mildly handicapped child from the potentially damaging effects of peer rejection.

As was stated earlier, some people make a very substantial case for the opposite viewpoint that self-concept development will be enhanced by attending a residential school. The argument exists that integration results in unfair competition for the handicapped child which ultimately results in lowered self esteem. Additional arguments are that:

A. Hearing impaired students should feel comfortable in the setting, receive satisfaction, experience success, and profit from learning and social activities. If the student passes all academic courses but feels isolated and has no friends in class, then he or she is not successfully mainstreamed; and

B. They lack language development, speechreading skills, speech growth, and general intellectual achievement which are essential for effective and profitable participation in classes for hearing students; without these skills, they are faced with problems of the learning situation—educationally, socially, and emotionally isolated or segregated from their hearing classmates.

This study has significance in that it is an initial investigation on the impact of different educational settings on
the self concept of hearing impaired pupils. It may also provide further evidence supporting mainstreaming or segregation in education.

II. Statement of Problem

The purpose of the study was to investigate the influence of educational settings on the self concept of hearing impaired children. The educational settings were a. Regular class with help; b. Class for hearing impaired in regular school; c. Jericho Hill off-campus; and d. Jericho Hill School. This represented a continuum from integrated to segregated educational settings.

The study attempted to answer the following question:

Is there a significant relationship between the self-concept of hearing impaired pupils and their educational settings?

III. Definition of Terms

The following is a definition of the terminology as applied to this study:

i. Hearing Impairment - A generic term indicating a hearing disability ranging in severity from mild to profound; it includes the subsets of deaf and hard of hearing.

ii. Pupils - Those hearing impaired children attending either day or residential educational settings.

iii. Age - The chronological age of the student as of December 31st, 1978. Pupils chosen were between 12 and 18 year as of that date.

NOTE: The age group was important as they were enrolled in the grades where all educational settings were represented. In addition, the grade was selected
to insure that they would have the necessary vocabulary and intellectual level to handle the questionnaire.

iv. Age of onset - Age at which deafness occurs--
Prelingual deafness: Deafness present at birth, or (prior to age two) prior to the development of speech or language under age two.

v. Hearing Loss - Hearing impaired pupils who have a hearing loss greater that 74 decibels (dB) unaided. For each pupil, the average threshold, expressed in dB, equals the arithmetic mean of the pure tone thresholds obtained at 500, 1000, and 2000 Hz for the better ear, using the American National Standards Institute (ANSI) criteria.

vi. Gender - Male and female.

vii. Method of Communication - Primary communication system used by each student, classified as either oral or total communication (Oral/Manual).

The educational settings under consideration are as follows:

i. Regular class with help (Integrated) - The hearing impaired child is fully integrated into a regular class with the help of a teacher of the hearing impaired.

ii. Class for hearing impaired in regular school (Insulated) - The hearing impaired child attends a special class for the hearing impaired in a regular school setting and integrates into non-academic courses: i.e. Business practice, art, physical education, home economics, metal and wood shops, etc., with all academic work occurring apart form hearing peers.
iii. Jericho Hill off-campus (Separated) - The hearing impaired child attends a special class for the hearing impaired in a regular school, contact with normally hearing children occurring at recess, lunch, and during physical education.

iv. Jericho Hill School (Segregated) - The hearing impaired child attends class with other hearing impaired students in the provincial school for the deaf.
Chapter II
SURVEY OF THE LITERATURE

1. Self-Concept Theory

The attention which the concept of self has been given in recent times has proven to be considerable. "Psychology and Sociology alone have accounted for over 2000 publications concerning the self" (Gorden and Gergen, 1968, Page 1). The self has figured prominently in theory and research on social control, economic behavior, social deviance, personal aspirations, psychopathology, and psychotherapy, to name but a few. Concern with the self-concept is becoming more and more an acceptable psychological approach to the empirical and theoretical studies of personality.

Self theorists, particularly sociologists, began as long ago as Cooley in 1902. They thought of man as a creature of his society. Mead (1934) is perhaps the closest to being the "father" of self theory. Mcleod (1947) states:

After a half century of neglect of the self by psychology, it is being increasingly recognized as a significant factor in human behavior (Pages 194-195).

Actually, James (1918) studied the self as a psychological construct, as did Mead (1934) in the 1930's. However, because of the influence of behaviorism on American psychology, study of the self or self-concept was considered unfashionable until more recent times.

The determinants of either a positive or negative concept, according to James (1918), were achievement, human aspirations, and values. A positive self-concept resulted from achievement of aspiration in a valued area such as music, art, or athletics, or
more simply, the self-concept "is determined by the ratio of our actualities to our supposed potentialities" (Page 15). James (1918) allowed for many additional sources for self-evaluation, including a man's body, psychic processes, house, wife, friends, reputation, ancestors, and children. He allowed also many "selves" for the same individual, among them existing the "social self".

Mead (1934) contained an elaboration of what James (1918) termed the social self. He stated that an individual internalizes the ideas and attitudes expressed by the key figures of his life. The individual therefore responds to himself and develops his self-concept consistent with these attitudes. He values himself as others, who are significant in his life, value him, and demeans himself to the extent that they reject, ignore, or demean him. Both Mead (1934) and James (1918) presented major insights and guidelines as well as general cogent formulations of the study of self.

Since the 1940's the self concept has become a most important psychological construct in personality theories. Wylie (1961) wrote a scholarly, critical volume that was helpful in integrating research and theory stating:

... All the theories of personality which have been put forth within the last two decades assign importance to a phenomenal and/or nonphenomenal self-concept with cognitive and motivational attributes (Page 1).

Sullivan's (1970) writings were an explanation of the work done with patients under treatment. His theory was somewhat of an extended analysis of Mead's interpretation of the social origins of self and the processes involved in the development of
self-concept and personality. For Sullivan (1947), the awareness of other people was omnipresent and important in determining self-concept. Positive or negative self-concept was the result of praise or degradation from significant others. Anxiety and avoidance were defenses against threats to positive self-concept.

Horney (1945 and 1950) explained the development of the self-concept through interpersonal processes. Poor self-concept, anxiety, and threats and the means of avoiding them result from such specific factors as domination, indifference, lack of respect, disparagement, lack of admiration, lack of warmth, isolation, and discrimination. According to Horney, the individual forms an ideal self-image to serve as a defense against anxiety and threat and to bolster the self-concept. Another Neo-Freudian, Fromm (1941 and 1947) theorized on the interpersonal effects and development of self. But he stressed the possible debilitation from social isolation. The self theorist, Rogers (1951), spoke of ideal self and real self incongruencies causing anxieties and conflicts to the individual. He did not treat the origins of self-concept directly, but his concern with the subjective basis of human behavior has provided an increased understanding of the self and has facilitated the study of self-concept.

There is a consensus in the literature that, regardless of the way it is measured, a good self-concept is related to other indices of good adjustment. Studies reviewed by McCandless (1967) revealed for example, that good self-concepts accompanied low anxiety. To some degree for most studies of the relation of
adjustment to anxiety, social desirability qualities of the items in both types of measure undoubtedly contributed to the relationship, as discussed above.

The focus of many studies has been the individual's perception of himself (his self-concept) in relation to his behavior. Results of these investigations tended to support the position that self-concept played a significant role in determining behavior. Woolner (1966) pointed out that a positive self-concept (liking one's self) tended to produce positive behavior such as accepting one's self, making appropriate adjustments, and achieving in school; while a negative self-concept produced unacceptable behavior such as uncooperativeness, under achievement, and maladjustment.

Carlson (1965) reported that sex difference in relations to the social self and personal self, increase with age. There appeared, in sixth grade, no difference between the personal and social self-concept orientations of the boys and girls of Carlson's study but by twelfth grade, the girls were significantly more socially oriented than the boys. However, Carlson (1965) found no differences in the actual level or stability of self-esteem of boys and girls.

Experimental studies indicated that a person maintaining a low self-esteem was less capable of resisting pressures to conform (Janis, 1954) and was less able to perceive threatening stimuli. They further indicated that a person possessing high self-esteem maintained a fairly constant image of his capabilities and of his distinctness as a person.

Another major empirical study, Coopersmith (1967) indicated
that:

. . . Persons high in self-esteem are happier and more effective in meeting environment demands than are persons with low esteem (Page 19).

In a later article, Avila (1970) noted that self-actualizing people saw themselves in positive ways such as "liked, wanted, acceptable, able, dignified, and worthy" whereas inadequate persons saw themselves as "unliked, unwanted, unacceptable, unable, and the like" (Page 400).

In general, people with high self-esteem were also accepting of other people (McCandless, 1967). It has also been found that high self-esteemed people of all ages are more popular than low self-esteemed people. However, the relationship between acceptance of others and popularity has not been clearly determined. It may be that one actively seeks those of whose acceptance he is not entirely sure; while those who accept one easily are not so assiduously counted and thus, perhaps, not the most popular.

There has been much research on the relationship between self-concept and achievement. Coopersmith (1959) reported that of four groups tested, each was found to differ significantly in achievement, sociometric status, ideal self, and achievement motivation, which apparently represented distinct types of self esteem. Combs and Soper (1963) found that kindergarten children's self-concepts were predictive of their academic achievement in first and second grade. Wattenberg and Clifford's (1964) results indicated that self-concept affected reading achievement more significantly than reading achievement affected self-concept. Renzaglia (1952) and Reeder (1955) examined
correlates of self-structure and found that a positive general self-concept is significantly related to high academic achievement. Thomas (1962) indicated a substantial relationship between the academic self-concept of college students to their college grades.

There have been, likewise, many studies on the effects of self-concepts and functioning in school. Jerseld (1951), for example, demonstrated the value of the self-concept in making the educative process more valuable. Reeder (1955) and Stevens (1956) found that positive feelings about the self are associated with good academic achievement, and Fink (1962) discovered that an inadequate self-concept is related to low academic achievement. Brookover et al. (1964) discovered that there are specific self-concepts of ability related to specific areas of academic ability and performances, and Cole (1968) found a significant positive correlation between self-concept and reading achievement and between self-concept and mathematical achievement.

The formation of the self-concept is not accomplished in isolation, but, as many self-concept and personality theorists maintain, is the result of the interpersonal relationships of any individual. Sullivan (1947) stated that the self-concept in an individual is the "result of the reflected appraisals of significant others" (Page 139). Ausubel (1952) claimed that the self-concept "arises within an interpersonal setting" in which "feelings about self are established" (Page 142). Cammins and Fagin (1957) stated that the individual's self-concept results from "the give and take of interactions with others" and is
"dependent upon the role he and others expect him to play in various social relationships" (Page 69). Dinkmeyer (1965) explained the self-concept as resulting from "the evaluational interaction with others" and from "the individual’s anticipation of his general acceptance or rejection in a given situation" (Page 184). Adler (1924), Lecky (1945), Maslow (1943), Mead (1934), Rogers (1951), Snugg and Combs (1949) are among the theorists who also explain self-concept as arising and developing from interaction with other people.

The responsibility, therefore, for the formation of self-concept in a hearing impaired child, as for any other child, lies with the significant others in the child’s interpersonal relationships—parents, relatives, friends, teachers, and counsellors. Parents in particular, because they have the most direct influence and the continuous primary interaction with their child, have their attitudes incorporated into the child’s perception of self. The child’s self-concept depends directly upon the parents’ love, acceptance, rejection, denial, overprotection, or positive or negative reactions the parents have toward their offspring. Luker (1978) mentioned the work of Schaefer, who investigated parenting atmospheres and agreed that:

Where we find parents who give love and autonomy, the chances are that the children are going to be happy, outgoing, successfully aggressive—that is, within our bounds of conformity—and by all odds, they are going to have the best self-image (Page 14).

A better grasp and realization of this responsibility of parents, the remaining significant others, and all society is certainly desired.
As children become more and more involved in the world surrounding them, they assume the task of interpreting their experiences and their relationship to the world. Thus, self-concept begins and continues to develop from the earliest kinds of experiences that an individual has with his surroundings, particularly those involving interpersonal relationships. However most writers go along with Allport and recognize that a special feeling is involved when the phenomenon being studied is the self and the majority describe it as a feeling of appropriation which serves to unify the personality through past, present, and future by extending the circle of objects, possessions, ideals, and groups that the individual calls his own. Allport (1955[a]) clearly describes phases in the development of this aspect of the personality ranging from the basic "bodily me" through "ego-extension" and finally involving the individual's self-image.

"Self" as a concept only has meaning in relation to others and the importance of this has been emphasised by Rogers(1959) who although postulating a self actualizing tendency similar in principle to the appropriate striving of other writers, also argues for a movement away from basic bodily needs through a process of socialization through communication and social interaction. Thus he argues that parallel with the development of awareness of self, there develops a need for positive regard from others.

Mead (1934) argued that the self-concept develops when the child begins to view himself as an object of other people's reactions. In this view, the concept of self is developed
through communication but does not precede communication. The child acts toward himself as he sees others acting toward him, and in the first stages of this "role taking", merely imitates without any interpretation of the roles of others.

Kennedy (1976) wrote:

A healthy self-concept evolving during the early years of life is critical for the psychosocial development of all children. The family, the neighborhood and especially the schools attempt to provide opportunities for children to find their place within a group and to acquire the tools necessary for mature social relations—acceptance and empathy for others (Page 3).

Craig (1965) stated that:

Because the deaf child is deprived of significant amounts of stimulation and informational feedback from his environment, he has less data available upon which to base his self-image. This observation suggests the possibility that his self-concept differs from that of the non-deaf child, but neither the existence nor the dimensions of this difference have been verified. To date, experimental investigation has been lacking on this crucial facet of the deaf child's development (Page 456).

Various personality studies of deaf persons have found that they tend to lag behind hearing people in social maturity and adjustment. Thus Levine (1956) found not only a lag in the understanding of the dynamics of interpersonal relationships but also a tendency for deaf children to have a highly egocentric view of life. Thus although various factors influence the child's attitude to self: the family lives in a neighbourhood, belongs to a social class, usually identifies with a religious group and derives from a national background; cutting across all other social groups in a deaf person's life is the classification "deaf/hearing". Even today the deaf are seen as less capable than their hearing peers. Such attitudes work
against the deaf person in social interaction, in employment, in community participation and most basically in individual self-concept development (Sussman and Stewart, 1971).

The process by which "awareness" of one's own attributes becomes translated into self-concepts was discussed by G.H. Mead (1956). His theory anchored the development of self-awareness in social interaction. "The self," he argued, "is not initially present at birth but arises in the process of social experience. It develops in a given individual as a result of his relations with the social system as a whole and to other individuals within that social system." Mead further argued that the individual experiences himself not directly, but in an indirect fashion, from his perceptions of the particular standpoint of the social system in which he functions. In other words, the individual becomes an "object" to himself by taking the attitudes of other individuals toward himself. The following model serves to represent this theory.

```
My Behavior

My Self-Concept  Others' Perception of Me

My Perception of Others Perception of Me
```

This system involves the learning and thinking processes that are an integral function of human understanding. It infers mental capacity--the information and insights that have become internalized by an individual through past experience. Psychological writings on the subject are legion. Erb (1971) has devoted considerable attention to "learning and thinking" and has noted:
Learning consists of persistent changes that take place within the person as a result of his exchange with the environment. From birth, and perhaps even before birth, a person's behavior is undergoing constant modification and revision (Page 141).

The importance of the child's self-image as a factor in learning has also been emphasized. Sears and Sherman (1964) wrote:

... The self-concept represents expected success in the child's endeavors to meet these problems and tasks [of development]. The self-concept is complex, made up of many facets, with each facet differing in importance—or reward value—from the others. Expectancies have been learned for each facet, so that the individual can predict success or failure in connection with behavior that pertains to a given facet. These expectancies have been acquired and can be changed according to principles of learning (Page 10).

A child's special needs status involves a relationship between himself, his disability, his family, environment, and society's resources. A child with a particular disability, such as deafness, may be helped to work around the disability so that it does not interfere with his development.

There are still teachers and other professional people working in or with Canadian schools who continue to tell parents of the deaf that these children can become the same as normal hearing people. The fact remains that these children are deaf and it cannot be overlooked that deafness is a disability. They can become normal deaf adults—and a few may integrate into the hearing world—if given every opportunity to grow and develop as human beings. However, their deafness can never be ignored or overlooked. If deafness is treated as a normal part of an individual's character, then the opportunity to grow up as a normal deaf adult is enhanced.

Communication, the central problem of the deaf child, is
also a central issue in the theoretical considerations of self-concept.

Brill (1974) argues that:

The proponents of the residential school take the position that segregation is a matter of communication rather than a matter of physical placement (Page 264).

If a deaf child is living at home but has little or no communication with his family even at the dining room table, and has little communication with his neighbours, he is, in actuality segregated. If in a residential school, he has easy communication with other children with whom he is living and with the adults with whom he comes into contact, he may be deemed an integrated member of that society. Brill (1974) stated that:

More of the psychological problems that result from segregation may occur to a child who is living at home but is not assimilated by his society than will occur to a child who is living away from home but in a society in which he is accepted (Page 265).

Schwartz, Ross, and Houchins (1975) pointed out:

Teachers of hearing impaired have suspected that communication abilities are related (most often negatively) to the deaf self-concept as the deaf person's ability to express himself in a hearing world is one of the most difficult and desired achievements (Page 572).

If the parents have established an effective communication with their deaf child at an early age, this would be a positive factor in the child's development.

Bauman and Yoder (1966) and Mykelbust (1969) contend that partial hearing loss can affect the self-concept more drastically than deafness because being so close to normal makes it more difficult to accept the disability. As is often the case
with the hard of hearing, the defect may go virtually undetected in many situations. Hearing peers may realize that something appears "different" about a hard of hearing individual without being consciously aware of the problem. This lack of knowledge by hearing individuals, can result in feelings of isolation and self-doubt, resulting in a low self-concept. The hard of hearing individual is often caught between two worlds; hearing too well to function comfortably with the deaf, yet not hearing well enough to function with the hearing without special assistance.

It seems apparent that there is a continuous interaction between the self-concept and the flow of experiences involved in the process of living and learning at school. One of the major issues confronting education today, therefore, would appear to be the determination and provision of the conditions necessary for helping children, from all segments of our population, acquire attitudes of self-acceptance which are accurately founded on feelings of competency in some area.

Goals of education for low-income culturally different areas have been proposed by Landers (1964), among others. These goals in general emphasize the importance of considering the pupil's self-image as a factor in learning and include, among other goals (1) the establishment of positive affectional relationships between the children and the school, (2) the improvement of their intellectual functioning and level of achievement, and (3) the inculcation of attitudes, habits, interests, and values which make for progress. "A pupil's self-image has to be considered as a factor in learning, as well as the influence of emotions, attitudes, and cultural expectations
held by members of a society for them" (Landers, 1964, Page 330).

Many theorists of varying schools of thought, feel that the concept one has of self influences every action. It also reflects the position taken by Allport (1955 [b]) that "all psychological functions [which are] commonly ascribed to self or ego must be admitted as data in the scientific study of personality" (Page 55), and the position taken by Perkins (1958), who suggests that the self-concept phenomenon can serve education in another way—"as a vital and important aspect of learning and development which the school through its educational processes seeks to promote and foster in every child" (Pages 203-204). For those who share such convictions, investigations of the concept of self, as a psychological construct which enables teachers, counselors, parents, and others to achieve deeper understanding of the behavior and development of children, become very important.

The importance of interpersonal relationships on the development of self-concept has particular relevance for the education of the hearing impaired child. The challenge facing education is as follows:

Is it ever possible to give handicapped children who spend most of their young lives in special schools, where they mix mainly with children who have similar handicaps, the range of experience which will enable them, both as children and later as adults, to live satisfying lives in the ordinary world? Or, to put the question the other way: Is it possible to provide in ordinary schools the specialized services that handicapped children require while at the same time ensuring that they mix socially and in school with the ordinary children from their neighbourhood? (Tizard, 1971, Foreward).

In conclusion, there can be no hard and fast rule as to
which educational setting is most beneficial, or conducive, to the development of a healthy self-concept for a hearing impaired child. An overall consensus of literature from the varying viewpoints of sociologists--Cooley (1902), Mead (1934), MacLeod (1947), personality theorists--Wylie (1961), or neo-Freudians Horney (1935-50), and Fromm (1941-47) indicate that regardless of how it is measured, a good self-concept is related to other indices of good judgement. Other varying viewpoints such as Craig (1965), Brill (1974), and Kennedy (1976) which are specifically related to studies of the deaf support this consensus also. A healthy self-concept is directly related to an individual's interpersonal relationship with environment, family, peers, and how well he is accepted. There have been successes, as well as failures, in both separate and integrated school settings for hearing impaired individuals and there can be no single factor to determine this. As each hearing impaired learner is an individual, so is the situation from which each learner comes, and to try to establish a single type of learning situation, to fit all hearing impaired individuals, would be a gross injustice to them. It is with careful judgement that parents, and teachers alike must weigh the entire environmental setting for a child, before deciding which will best suit his needs as a human being. Even then, close follow-up is indicated to make sure that this continues to remain the environment best suited to his needs.

B. Self-Concept Research Studies Related to Deafness

In this section, the author reviewed selected research findings relative to the self-concept of hearing impaired
children in the various educational settings discussed in chapter 1. The purpose was to direct the results of empirical studies in these areas toward uncovering implications of particular use to practitioners working with hearing impaired pupils in various educational environments. Conflicting evidence appears to exist in the research literature on the relative self-concepts of the hearing impaired in different educational settings.

Several studies support the idea of segregation. Craig (1965) found that institutionalized deaf children had higher self-esteem than a group who were not institutionalized. Van den Horst (1971) compared groups of hard of hearing children who were fully integrated into normal schools with similar children in special schools. The groups were matched for I.Q., age, sex, degree and nature of loss, and hearing aid use. The results indicated that although the integrated group performed better on a verbal achievement test, the children in the special school appeared to be better adjusted.

Dale (1972) found that close friendships rarely developed between integrated hard of hearing and normal children. Shears and Jensema (1969) found that integrated hard of hearing students felt frustrated with and resentful of their status in the class, while segregated students evidenced good social adjustment and peer relations.

A number of studies showed that hearing impaired children in regular classes did not perform at the level of their hearing peers (Fisher, 1971; Vanden Berg, 1971; Peterson, 1971; Peckham, Scheridand and Bulter, 1972).
Several other studies provided additional evidence that integration may have an adverse effect on mental health (Dale, 1972; Shears and Jensema, 1969; Peterson, 1971; Craig, 1965).

There is little research evidence on how well hearing impaired children actually succeed in integrated settings. Along with concerns about social adjustment is the issue of self esteem. It has been argued that integrated children will have lower self-esteem because they are comparing themselves to normal children rather than to other hearing impaired children.

Apart from these observations and experimental judgements, several studies of a more scientific nature have been conducted. Force (1956) found that physically handicapped children were not as well accepted as normal children in integrated classrooms at the elementary school level. Those who were accepted manifested many socially desirable traits; of those not accepted, none had enough of these positive assets to completely offset the negative effects of being labelled handicapped by their classmates. The findings of Elser (1959) also support the contention that hearing impaired children are not as well accepted as normal children in integrated classrooms. Perry (1965) discovered that hearing impaired children, as a group, seem less socially accepted than normal hearing children in normal classes.

The impact of mainstreaming upon social development and adjustment of hearing impaired children has received only moderate empirical emphasis in the literature (Elser, 1959; Frick, 1973; Kennedy, Northcott, McCauley, and Williams, 1976;

Hearing impaired children have been found to be retarded socially, and there is some evidence that social retardation increases with the degree of segregation from regular life (Quarrington and Solomon, 1975). Rister (1975) however, found that 50% of a group of severely and profoundly deaf children who were successfully integrated did not appear to have social development delays.

Telford and Sawrey (1967) found, in their study comparing hearing impaired children integrated into a regular elementary school with deaf children in special schools, that while the children in the integrated school had higher school achievement, they also had more adjustment problems.

Recently, Sarfaty and Katz (1978) studied three groups of hearing impaired pupils in three different educational settings. They found that the pupils in the two integrative school settings as a group and individually, had higher self-concepts than the pupils in the special school. No differences appeared in the adjustment profiles of the pupils in all three settings.

Kennedy and Burininks (1974) found that hard of hearing and deaf children actually had higher social status within the group than normally hearing children. This is an unusual result, even more so because it is usually found that all handicapped children tend to be somewhat socially isolated (Shears and Jensema, 1979; Lapp, 1957; Blatt, 1958; Johnston, 1962).

There is considerable indication that mildly handicapped youngsters have relatively lower self-esteem. Low self-concept has historically been associated with low intellectual
functioning (Macmillan, 1977).

Of particular interest is Sheare's (1978) finding that peer acceptance or rejection exerts a significant impact on handicapped children's self-esteem. In his sample, pupils who were rejected by peers also revealed lower measures of self-concept. Academic failure has been found to correlate with lower measures of self-esteem (Lumpkin, 1959; Bodwin, 1959). Personality variables such as becoming emotional when frustrated, giving up on tasks prematurely, evading responsibility, fatigue, depression, and anxiety were all found by McIntire and Drummond (1977) to be strongly associated with measures of self-concept in children.

Generally the research literature is very disappointing when seeking support for a facilitating effect on self-concepts of handicapped pupils as a function of class placement (e.g., regular class, special class, resource room). For example, Carroll (1967) reported that educable retarded pupils in special classes were more self-derogatory than retarded pupils who were partially integrated into regular classes. However, Hoeltke (1967) and Schurr and Brookover (1967) found that retarded students in special classes had better self-concepts than retarded children placed in regular classrooms. On the other hand, Knight (1967) and Bacher (1965) found no differences as a function of class placement.

III. Self-Concept Measurements

If mainstreaming exerts an influence on the child, one might anticipate that the child may feel better about himself ("I am a normal student") or that he may devalue himself as a
result of being confronted constantly by peers who are more able
than he. In either case, the child's feelings of self-worth, or
the extent to which he is "well-adjusted" personally, will be
affected.

Shavelson, Hubner, and Stanton (1976) contained an analysis
of the major scales available for measuring self-concept. These
scales were of unknown validity for handicapped populations. The
language and vocabulary demands introduced bias or error into
the data. Moreover, the retarded were known to give more
socially desirable answers than children of average intelligence
(Crandall, Crandall, and Katkovsky, 1965; Jones, 1976), which
contributed additional error to the data when children (assuming
they comprehended what the question asked) give an answer they
thought should be given instead of the answer that reflected
their actual feelings.

Briefly, consider the points raised by Cohen and DeYoung
(1973) as major arguments in education cases: a) tests used to
measure intelligence are inappropriate as they do not accurately
measure learning abilities of the plaintiffs; b) unless the
tester is familiar with the cultural background and language of
the child, he functions incompetently; c) parents have not been
informed and involved in the placement process; d) the special
class is inadequate and fails to develop adequate educational
and vocational skills; and e) placement and labeling do
irreparable personal harm.

Investigations of personality variables in deaf populations
were most difficult to interpret owing to a lack of information
concerning the adequacy or appropriateness of measurement
instruments for hearing impaired groups. Garrison, Tesch, and DeCaro (1978) indicate that:

Although experiences associated with deafness have been predicted by various theoretical perspectives to have negative effects on personality development in general and self-concept in particular, attempts to measure such effects have employed different tests and produced inconsistent findings (Page 968).

The semantic differential technique used by Blanton and Nunnally (1964) indicated that deaf adolescents perceived themselves more negatively than did hearing students. Similarly, a study of deaf adults using the Tennessee Self-Concept Scale showed them to have a generally lower level of self-regard (Sussman, 1973). Conversely, Brunschwig (1936), using a self-report inventory, found hearing impaired students to have a more positive self-image than did a group of normal-hearing children. Finally, Levine (1956) interpreted the results of a Rorschach assessment of deaf adolescent girls as showing personality constriction, which was attributed to limited language development associated with deafness. Supporting the above position, Lewis (1968) found that teacher ratings of personality maturation of deaf students were positively related to the students' social-emotional vocabulary level.

Many of the tests used with deaf respondents were designed specifically for hearing persons. Consequently, they possess both language and situational complexities lying outside the range of ability and experience of the deaf individual. With few exceptions, the psychological tests used with the deaf have been subjected to so many criticisms that their results appear frequently uninterpretable.

The difficulties encountered in the psychological
evaluation of hearing impaired persons have been frequently noted (Levine, 1960; Vernon, 1967 and 1968; Myklebust, 1960) and appear to be related to two main factors which are 1) familiarity with the procedure and format of standardized testing and 2) the language level of the test items.

Some accommodations to these two problems have been made in the areas of intelligence and academic achievement testing, but the area of personality evaluation remains an especially difficult one for workers with the deaf. Most standardized tests are of very limited value because of a lack of appropriate normative populations of deaf persons against which to compare the individual being evaluated.

Schlesinger and Meadow (1972) stated that:

The nature of the deaf child's self-image, and the relation of the development of the self-concept and the acquisition of language, are of great importance to those interested in both theoretical and practical aspects of deafness (Page 113).

Language, as it relates to the development of the self, is central to the sociological perspective of symbolic interaction elaborated in the writings of Mead (1934) and Cooley (1902). This position later was elaborated into what is now called the symbolic interactionist approach to self-definition, or simply the interactionist approach (e.g., Gordon and Gergen, 1968; Manis and Meltzer, 1972).

Garrison and Tesch (1978) reported that:

According to this theory, the development of knowledge concerning the self is dependent entirely upon one's experiences with others, which provide information in the form of feedback and expectations regarding the self (Page 458).

Language is considered to be an essential element in the
symbolic interaction process and in the organization of experience, which are both necessary for the development of the self-concept (Mead, 1934). As such, Myklebust (1960) argued that deafness imposes on experience by limiting interaction and linguistic feedback from the social environment, thus affecting the development of the self-concept. Schlesinger and Meadow (1972) stated that:

The self can become an object to itself by means of the manipulation of symbols, that is, through the use of language (Page 133).

Research efforts towards defining the characteristic personality of the deaf child have been hampered by the language handicap itself. Test validity is severely challenged when the language of the test becomes as much or more of an issue than the task to be tested.

Based on research findings of Green and Shepherd (1975) which showed deaf children to have a restricted semantic system in comparison to hearing children, it appeared that the diversity of findings obtained in assessment of self-concept of deaf persons may have resulted in part from measurement error due to the linguistic limitations manifested in deaf populations.

Although Vegely and Elliott (1968) concluded that the poor scores of deaf children on a standardized personality inventory could not be explained as an artifact of the test, Rudner (1978) identified six linguistic structures which may have biased test items against hearing impaired examinees.

According to Levine (1960), the deaf child may tend to attribute very literal meanings to words thereby having
difficulty in understanding their more abstract connotations.

The vocabulary, or more broadly, the language taught, might well be examined and assessed for possible inclusion of items and concepts pertinent to facilitating more precise communication in social interaction. Dependence of self-concept upon language development suggests that this aspect of the deaf child's education needs greater stress.

Recently, Garrison, Tesch, and DeCaro (1978) found that deaf students who scored higher on a test of reading comprehension obtained more positive scores on the Tennessee Self-Concept Scale (TSCS) than did students who were lower in reading ability. Subsequent interviews with 30 members of the study sample revealed that many of the deaf students had interpreted test stimuli peculiarly, thus affecting their scores on the TSCS in a negative manner. It was concluded that the low levels of self-esteem indicated by scores on the TSCS reflected limited understanding of the test items in their written form.

Given the variety of measures used and the range of findings concerning self-concept levels among the hearing impaired, it was unclear whether the deaf individual experienced difficulty in self-perception or if disparities in research findings represented an artifact of the measurement process.
Chapter III
Methodology

I. Instrumentation

A. Self-Esteem Inventory

The Coopersmith (1967) Self-Esteem Inventory was used to measure self-esteem (refer to Appendix A). This measure was chosen in consultation with the California School for the Deaf at Berkeley, California. It must be noted that the Coopersmith was recommended as the best available inventory of self-esteem, but was still not entirely appropriate for deaf children.

As the Coopersmith was designed for hearing individuals, the linguistic level of the test was also designed for the hearing. In order to make the Coopersmith more understandable for a deaf population, certain linguistic components needed to be adapted. Without the necessary adaptations, many parts of the Coopersmith Inventory might have proven to be too difficult for the students to understand from a linguistic standpoint. As the goal for the Coopersmith is to evaluate self-concept and not linguistic capability, had the test been left unchanged the test results would be considered invalid. By administering an altered language appropriate inventory, it is hoped that a more valid testing occurred.

Hence, a letter (Appendix B) was sent to various well-known professors, who had expertise in research of deafness in North America. Individual responses by the professors indicated that a) the issue of the self-concept and how to measure it, especially in children proposes a convoluted and confusing problem; b) pessimism existed about research endeavors which
rely exclusively upon the use of paper and pencil self-concept assessment techniques; c) assistance to the author in regard to self-concept tests for the hearing impaired could not be offered due to a lack of references directly related to the author's research topic; or e) having had no experience in the area of self-concept testing with hearing impaired, no pertinent information could be offered.

Coopersmith (1967) defines self-esteem in the following manner:

By self-esteem we refer to the evaluation which the individual makes and customarily maintains with regard to himself. It expresses an attitude of approval or disapproval, and indicates the extent to which an individual believes himself to be capable, significant, successful, and worthy (Pages 4-5).

The Self-Esteem Inventory was constructed on the basis of items selected from the Rogers and Dymond scale (1945) which were reworded for use with children of 8 to 12 years old. It consists of fifty-eight items that constitute the five parts as follows: General Self (twenty-six items), Social Self-Peers (eight items), Home-Parents (eight items), Lie scale (eight items), and School-Academic (eight items). The parts need not be scored separately, with the exception of the Lie Scale. Each item checked in the positive direction, i.e., an item designating high self-esteem checked in the "Like Me" column or an item designating low self-esteem checked in the "Unlike Me" column was assigned one point.

Janice Booth, a Post-Graduate (doctoral) student in reading education at the University of British Columbia, using the Spache and Fry formulae calculated the average reading level of the Coopersmith Self-Esteem Inventory at grade 3.5 to 3.8. Furth
(1966) showed that the average deaf student rarely achieved a reading level beyond that of the fifth grade. Other studies (Stelle, 1941; Babidge, 1965; Denton, 1966; McClure, 1966; Vernon and Koh, 1970; Moores, 1976) support Furth's findings indicating that at graduation, deaf school students rarely read beyond the third to fifth grade level. This evidence indicates that the average deaf student at graduation should be able to comprehend the language used in the Coopersmith.

Research findings indicated that the difference between the mean scores for boys and girls was not significant (Coopersmith, 1959 and 1967). Coopersmith (1959) reported that test-retest reliability after a five week interval with the sample of 30 fifth-grade children was 0.88. He reported that the reliability after a three year interval with a sample of 56 children from 1,748 children of diverse background was 0.70 (Coopersmith, 1967). In the Coopersmith (1959) study, his subjects were 102 fifth- and sixth-grade children and he reported that partial correlations between self-esteem and sociometric choice with school achievement held constant, and correlations between self-esteem and school achievement with sociometric choice also held constant. From the Coopersmith (1967) study, there was an attempt to compare the self-esteem measure with other behavioral criteria. The findings indicated a significant relationship between the scores on the self-esteem and these other criteria.

B. Inferred Self-Concept Scale

The McDaniel (1973) Inferred Self-Concept Scale was used to measure self-concept (refer to Appendix C). This measure was chosen in consultation with the California School for the Deaf
at Riverside, California. This showed the same recommendation as explained previously in the Coopersmith Self-Esteem Inventory.

McDaniel (1973) defines self-concept in the following manner:

Self-concept is defined by English and English as "a person's view of himself". Here, we are concerned with that concept of self generated by and in the school setting.

A "positive" self-concept is here assumed to be a person's view of himself as "competent" in a school setting and as "accepted" by classmates and adult school personnel within that setting (Page 3).

The McDaniel (1973) Inferred Self-Concept Scale has each of the 30 items rated on a 5-point scale and all items are scored in an affirmative direction. Eight items (1, 2, 4, 18, 19, 20, 25, 29) selected randomly from the 30 items, are worded so that an item designates that a high concept of self is perceived by the rater (a teacher of the hearing impaired) when the item is given a "four" or a "five" rating. An item designates that a low student self-concept is perceived by the rater when it is given a "one" or "two" rating. Twenty-two items are worded so that they have to be rated in the reverse direction. Thus, the perception of negative self-concept characteristics requires the observer to rate items in an opposite direction from items assessing positive self-concept.

In the McDaniel study (1973), his subjects, about whom the data were provided by teachers and counsellors, consisted of 180 children; 30 each in grades one through six, 96 teachers; one from each grade in each of 16 elementary schools, and 16 elementary school counsellors. He reported that a correlation coefficient was significant at the 0.01 level between the
counsellors' "total scale" scores, and the teachers' "total scale" scores for the 180 students. The split-half reliability coefficients between the sum of the 15 even-numbered items and the sum of the 15 odd-numbered items for: 1) Counsellors, 2) Teachers, and 3) Counsellors and Teachers combined were significant beyond the 0.01 level (McDaniel, 1973). McDaniel (1973) reported that test-retest reliability after six months with the same sample was significant beyond the 0.01 level. He reported that self-concept scores which were correlated with many of the behavioral variables, indicated a significant relationship among them.

C. Biographical Data Sheet

In order to gather additional information on the child and the teacher, a biographical data sheet (refer to Appendix D) was developed. This information assisted in describing the children and teachers involved in the various educational settings.

II. Subjects

The subjects included in this study met the following criteria:

1. Had reached the twelfth but not the eighteenth birthday and was attending a Public School or School for the Deaf in British Columbia on January 1, 1979.
2. Had a hearing threshold level greater than 74 decibels (dB).
3. Were capable of completing a pencil and paper test.
4. Had a hearing loss since birth or prior to two years of age.

These students were randomly selected from the population identified by using the Demographic Study of Hearing Impaired Students in British Columbia (Clarke et al. 1977). There were 12
subjects in a regular class with help, 15 subjects in a class for hearing impaired in the regular school, 15 subjects in Jericho Hill off-campus, and 15 subjects in Jericho Hill School. The smaller number of subjects in the regular class with help group was due to postal difficulties. Table II lists the description of the subjects in four different educational settings.
Table II
Hearing Impaired Subjects:
Gender and Age by Educational Environments

<table>
<thead>
<tr>
<th>Regular Class With Help</th>
<th>Class for Hearing Impaired in Regular School</th>
<th>Jericho Hill Off-Campus School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>N=12</td>
<td>N=15</td>
</tr>
<tr>
<td>Gender Age</td>
<td>Gender Age</td>
<td>Gender Age</td>
</tr>
<tr>
<td>Male 12</td>
<td>Male 12</td>
<td>Male 13</td>
</tr>
<tr>
<td>Male 13</td>
<td>Male 12</td>
<td>Male 14</td>
</tr>
<tr>
<td>Male 16</td>
<td>Male 13</td>
<td>Male 15</td>
</tr>
<tr>
<td>Female 12</td>
<td>Male 14</td>
<td>Male 15</td>
</tr>
<tr>
<td>Female 12</td>
<td>Male 14</td>
<td>Female 12</td>
</tr>
<tr>
<td>Female 14</td>
<td>Male 15</td>
<td>Female 12</td>
</tr>
<tr>
<td>Female 14</td>
<td>Male 15</td>
<td>Female 13</td>
</tr>
<tr>
<td>Female 15</td>
<td>Female 12</td>
<td>Female 13</td>
</tr>
<tr>
<td>Female 16</td>
<td>Female 13</td>
<td>Female 15</td>
</tr>
<tr>
<td>Female 17</td>
<td>Female 13</td>
<td>Female 16</td>
</tr>
<tr>
<td>Female 18</td>
<td>Female 13</td>
<td>Female 16</td>
</tr>
<tr>
<td></td>
<td>Female 14</td>
<td>Female 17</td>
</tr>
<tr>
<td></td>
<td>Female 15</td>
<td>Female 18</td>
</tr>
</tbody>
</table>
III. Procedure in Collecting Data

A letter (refer to Appendix E) was sent to the Directors of Special Education and Principals of the schools briefly explaining the study, and asking for their support to investigate the relationship of educational settings to the self-concept of hearing impaired children. Once they agreed to support the study, each director/principal was asked to nominate a teacher of the hearing impaired to be a study coordinator, responsible for coordinating the testing with the Coopersmith Self-Esteem Inventory and the McDaniel Inferred Self-Concept Scale for his/her district. Once the study coordinators had been named by their directors of special education or principals of the schools, they received the self-concept test materials and biographical data sheets with a letter (refer to Appendix F and G) for the teachers and parents, as well as full directions for testing.

Because the instructions from the Coopersmith Self-Esteem Inventory were too difficult for a hearing impaired student to understand, they were modified to a more appropriate level. For example, in the original sentence "Please mark each statement in the following way.", the word "statement" was changed to "sentence". With the request "If the statement describes how you usually feel, put a checkmark in the column 'Like Me'", the word "describes" was changed to "tells", and "in the" was changed to "under". The phrase "Unlike Me" was changed to "Not Like Me". This was necessary to assure that the deaf child understood the instructions. This was very important based on the literature for self-concept measurements (see chapter II). Coopersmith has
substantially revised his thinking and feels that since all current measures of self-concept are heavily language based, they present low validity and reliability coefficients when used with language impaired children. A "practice" exercise was developed in order to help the hearing impaired child understand the two different columns "Like Me" and "Not Like Me". It was vital that the subjects understood the separation of the two ideas.

The Coopersmith Self-Esteem Inventory was administered by the study coordinators and the author, on a group/individual basis, to the subjects. Preliminary instructions were designed to minimize anxiety, and indicated that the inventory was not related to academic work, nor was it a test of achievement, and that the results would remain confidential. The author instructed the study coordinators that if, during the administration of the instrument the subject could not understand an item, then any means of communication (oral, cued speech, or total communication) could be used for clarification. The author's instructions requested that testing take place in a quiet classroom with adequate lighting conditions with each session taking approximately 15 to 20 minutes.

The teachers of the subjects involved in this study were asked to rate each subject on the McDaniel Self-Concept Scale—a five point scale presumed to be related to self-concept. The teachers rated the subjects independently and at no time collaborated in their ratings.

All data from the Coopersmith, the McDaniel test materials, and the biographical data sheets were collected by the author.
Letters of thanks and appreciation (refer to Appendix H) were forwarded to the directors of special education, the principals of the schools, and the study coordinators.

IV. Statistical Procedures

The nonparametric analog to analysis of variance (one way classification, for ordinal data) is the Kruskal-Wallis One-Way Analysis of Variance (ANOVA). Kruskal-Wallis can be used for experimental and nonexperimental data and is simple and effective. Cases arise in psychological, sociological, and educational research where the measurement is such that it is doubtful whether parametric analysis is legitimate. In many cases it is very possible to rank order the scores and do the analysis on the ranks. This was used to analyze the self-concept of hearing impaired pupils with regard to their educational settings. A problem that often arises with data is that several scores may be exactly the same. Although the underlying dimension on which we base our measures may be continuous, our measures are, for the most part, quite crude. For the Kruskal-Wallis H-Test, there is a provision for tied ranks in the data. If tied ranks do occur, there exists a correction factor. To investigate the relationship between the Coopersmith scores and the McDaniel scores, the Spearman correlation coefficient was used due to the data being ordinal in nature. The self-concept profiles of the four educational settings were compared using a one-way ANOVA.
CHAPTER IV

RESULTS

The responses of the hearing impaired students and the responses of the teachers of the hearing impaired using the Coopersmith Self-Esteem Inventory and the McDaniel Self-Concept Scale respectively were statistically and separately treated using a nonparametric ANOVA. The results and a comparison between the two are given in the succeeding pages.

There were a total of fifty-seven (57) students involved in this study and a total of twenty-three (23) teachers participated in evaluating the students' self-concept.

I. Findings Using the Coopersmith Self-Esteem Inventory

Comparisons were made of the student scores in the four different school setting modalities. Table III indicates no significant differences among the groups at the alpha=.05 level. Inspection of the data showed that the mean rank scores of the class for hearing impaired in regular school settings was highest while the mean rank for the Jericho Hill School students was lowest. The chi-square value indicated that the differences in mean rank were not statistically significant at the alpha=.05 level.
Table III
Comparisons of Self-Esteem Scores
For Four Groups (Kruskal-Wallis ANOVA)

<table>
<thead>
<tr>
<th>Educational Setting</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>Standard Deviation</th>
<th>Mean Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Class With Help</td>
<td>12</td>
<td>33.75</td>
<td>6.58</td>
<td>27.67</td>
</tr>
<tr>
<td>Class for Hearing Impaired in Regular School</td>
<td>15</td>
<td>36.6</td>
<td>5.04</td>
<td>37.40</td>
</tr>
<tr>
<td>Jericho Hill Off-Campus</td>
<td>15</td>
<td>34.27</td>
<td>5.98</td>
<td>27.93</td>
</tr>
<tr>
<td>Jericho Hill School</td>
<td>15</td>
<td>32.27</td>
<td>4.28</td>
<td>22.73</td>
</tr>
</tbody>
</table>

Chi-Square observed: 6.154
P: 0.104
II. Findings Using the McDaniel Self-Concept Scale

Table IV also indicates that there are no significant differences among the teachers' scores of the McDaniel Self-Concept Scale for the hearing impaired students in each of the four educational settings. It was interesting to note upon the inspection of the data from this sample that Jericho Hill School teachers had the highest self-concept mean rank for their students while the Jericho Hill Off-Campus teachers obtained the lowest mean rank. These differences, however, did not reach a level of statistical significance (p=0.37).

Table IV
Comparisons of Self-Concept Scores
For Four Groups (Kruskal-Wallis ANOVA)

<table>
<thead>
<tr>
<th>Educational Settings</th>
<th>N</th>
<th>X</th>
<th>Standard Deviations</th>
<th>Mean Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Class With Help</td>
<td>12</td>
<td>121.6</td>
<td>15.08</td>
<td>30.42</td>
</tr>
<tr>
<td>Class for Hearing Impaired in Regular School</td>
<td>15</td>
<td>118.13</td>
<td>17.4</td>
<td>27.83</td>
</tr>
<tr>
<td>Jericho Hill Off Campus</td>
<td>15</td>
<td>116.3</td>
<td>15.35</td>
<td>24.17</td>
</tr>
<tr>
<td>Jericho Hill School</td>
<td>15</td>
<td>125.2</td>
<td>18.21</td>
<td>34.47</td>
</tr>
</tbody>
</table>

Chi-Square observed: 3.159
P: 0.368
III. Correlation Between the Two Sets of Scores

Based on the calculation of the Spearman correlation coefficients, there was a statistically significant relationship between the scores from the Coopersmith Self-Esteem Inventory and the McDaniel Self-Concept Scale ($r = .446$, $p < .01$).

If the obtained Coopersmith and the McDaniel are reliable and valid measures of self-concept, it would appear that perceptions of hearing impaired students and their teachers tend to agree.

Coopersmith used the word "self-esteem" and McDaniel used the word "self-concept". An examination of the manuals showed that the two words are similar in the perceptions of the particular standpoint of the social system.

IV. Coopersmith's Lie Items Scores

Table V lists the mean scores showing the number of students, sub-divided into the four school modalities, and how they responded incorrectly to the eight lie items of the Coopersmith Self-Esteem Inventory. A score of zero (0) meant either the student did not understand the idiomatic language of the test, answered the test items at random, or gave a literal interpretation to the item (e.g., #13: I always do the right thing). An analysis of variance between the four groups yielded non-significant F-values of .95 (df=3,53).

An examination of Table V shows that when the different school systems are somewhat differentiated, Jericho Hill School appears to have responded more dishonestly to the test because it has the lowest mean scores. At the same token, the class for hearing impaired in the regular school and regular class with
help appear to have responded most honestly to the test because they have the highest mean scores, even though there is no statistically significant difference between the scores.

Table V
Mean Scores on Coopersmith's Lie Items Scores

<table>
<thead>
<tr>
<th>Educational Setting</th>
<th>N</th>
<th>( \bar{X} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Class with help</td>
<td>12</td>
<td>4.4</td>
</tr>
<tr>
<td>Class for Hearing Impaired in Regular School</td>
<td>15</td>
<td>4.4</td>
</tr>
<tr>
<td>Jericho Hill Off Campus</td>
<td>15</td>
<td>3.7</td>
</tr>
<tr>
<td>Jericho Hill School</td>
<td>15</td>
<td>3.3</td>
</tr>
</tbody>
</table>
Table VI is a further breakdown of each of the school systems. It shows the students separated in two groups for lie items scores showing 0 - 4 and those showing 5 - 8. It is interesting to note that two columns appear non-significant in the difference (mean scores) between the groups on the total Coopersmith scores. However, Jericho Hill Off Campus had somewhat of a difference between two columns.

Table VI
Mean Scores on Coopersmith for Lie Items Scores Split Groups

<table>
<thead>
<tr>
<th>Educational Settings</th>
<th>Lie Items Scores 0 - 4</th>
<th>Lie Items Scores 5 - 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Class with Help</td>
<td>33.6</td>
<td>34.0</td>
</tr>
<tr>
<td>Class for Hearing Impaired</td>
<td>37.6</td>
<td>29.4</td>
</tr>
<tr>
<td>in Regular School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jericho Hill Off Campus</td>
<td>36.7</td>
<td>29.4</td>
</tr>
<tr>
<td>Jericho Hill School</td>
<td>33.2</td>
<td>30.8</td>
</tr>
<tr>
<td></td>
<td>X 35.2</td>
<td>X 32.2</td>
</tr>
</tbody>
</table>
An item analysis of the same eight items was done. Table VII shows the frequency of incorrect responses made to each of the items.

A list of the lie test items is found in Appendix A where they are identified by a zero (0) in the answer column. It is interesting to note that three items (#13, 27, and 48) had a high frequency of incorrect response. A detailed examination of these items show that they are people-oriented. In other words, they are items that have to do with interpersonal relationships. The highest score, particularly, was on the item that shows absolute positive self-regard ("I always tell the truth.").

It is possible that the deaf children see themselves as being well accepted by other people, thus indicating a high regard for oneself. It is also possible that the language level of comprehension has led to misunderstanding. For example, #13 uses the word "right" in the sentence, and #27 uses the word "like", both words having different connotations depending on their use in context. These findings indicated that linguistic deficiency may hinder the deaf child's development of understanding of himself, as well as his relationships with others.

At the other end of the continuum are the items that were least frequently responded to (#6, 34, 41, and 55). These items are also people-oriented but not in broad, global terms. They are more self-generated items in relation to one-to-one interactions.
Table VII

Number of Incorrect Responses to the Coopersmith's Lie Items

<table>
<thead>
<tr>
<th>Educational Setting</th>
<th>Lie Items</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#6 #13 #20 #27 #34 #41 #48 #55</td>
<td></td>
</tr>
<tr>
<td>Regular Class with help (N=12)</td>
<td>1 4 4 10 4 5 8 6 42</td>
<td></td>
</tr>
<tr>
<td>Class for Hearing Impaired in Regular School (N=15)</td>
<td>6 9 7 13 2 4 10 5 56</td>
<td></td>
</tr>
<tr>
<td>Jericho Hill Off-Campus (N=15)</td>
<td>7 10 8 14 4 6 13 3 65</td>
<td></td>
</tr>
<tr>
<td>Jericho Hill School (N=15)</td>
<td>6 9 7 13 9 6 11 7 68</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 32 26 50 19 21 42 21 231</td>
<td></td>
</tr>
</tbody>
</table>
The language component enters into this again but more in terms of the negative implication of the word "never". Regardless of context, the automatic response to "never" was on the column "Not Like Me".

Another area that was looked at was the kind of educational setting to determine any difference in frequency of responses. It is most interesting to note that the Jericho Hill students had the higher number of incorrect responses.

With institutionalization of the deaf their psychosocial development is not as wholesome primarily because of the lack of exposure to the world and a dearth of experience in dealing with a lot of social situations that hearing children take for granted. They are isolated and insular, and their reactions to people are stereotyped and limited.

V. Comparisons of Gender Differences Using the Coopersmith and the McDaniel

On the Coopersmith Self-Esteem Inventory, the total mean scores between the males and females were almost identical such that no significant differences were shown. Even the examination of means between the two genders from one educational setting to the other showed close similarity. Table VIII shows this rather clearly.

On the McDaniel Self-Concept Scale there was some difference in the mean scores between the genders although the total mean scores still did not show enough discrepancy to obtain a statistically significant difference at the alpha=.05 level. It is interesting to note that the Regular Class with Help and the Jericho Hill School have considerable differences
between the genders. Table IX shows the breakdown of the mean scores.

### Table VIII
Mean Score for Gender on Coopersmith

<table>
<thead>
<tr>
<th>Educational Setting</th>
<th>Gender</th>
<th>Mean</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Regular Class With Help</td>
<td>3</td>
<td>9</td>
<td>34</td>
<td>33.67</td>
</tr>
<tr>
<td>Class for Hearing Impaired in Regular School</td>
<td>8</td>
<td>7</td>
<td>37</td>
<td>36.14</td>
</tr>
<tr>
<td>Jericho Hill Off Campus</td>
<td>5</td>
<td>10</td>
<td>34</td>
<td>34.4</td>
</tr>
<tr>
<td>Jericho Hill School</td>
<td>8</td>
<td>7</td>
<td>32.63</td>
<td>31.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>( \bar{X} )</td>
<td>34.41</td>
</tr>
</tbody>
</table>

### Table IX
Mean Score for Gender on McDaniel

<table>
<thead>
<tr>
<th>Educational Setting</th>
<th>Gender</th>
<th>Mean</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Regular Class With Help</td>
<td>3</td>
<td>9</td>
<td>101.67</td>
<td>128.33</td>
</tr>
<tr>
<td>Class for Hearing Impaired in Regular School</td>
<td>8</td>
<td>7</td>
<td>116.5</td>
<td>120.0</td>
</tr>
<tr>
<td>Jericho Hill Off Campus</td>
<td>5</td>
<td>10</td>
<td>118.8</td>
<td>115.1</td>
</tr>
<tr>
<td>Jericho Hill School</td>
<td>8</td>
<td>7</td>
<td>129.87</td>
<td>119.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>( \bar{X} )</td>
<td>116.71</td>
</tr>
</tbody>
</table>
Chapter V
Discussion and Implications

The self-concept measures of fifty-seven (57) hearing impaired pupils in four different educational settings of British Columbia and twenty-three teachers in evaluating the students' self-concept indicated no statistically significant difference in ranked scores on the Coopersmith Self-Esteem Inventory or the McDaniel Self-Concept Scale used at the alpha=.05 level. It is interesting to note that there was no significant difference among the four groups on the self-concept scores. It would appear that in self-concept, the four groups have a common problem to which school setting apparently has no relationship (p=0.37).

Also, there was a statistically significant relationship between the scores from the Coopersmith and McDaniel (r=.446, p<.01). The correlation between the two sets of scores would make it appear that teachers and students tend to agree in their perceptions.

There was no statistically significant difference in mean scores between the four groups, who responded incorrectly to the eight lie items of the Coopersmith scores, (F=.95, df=3,53). Even though, it is interesting to note that two groups for lie items scores showing 0 - 4 and those showing 5 - 8 appear non-significant. It shows that the language levels of the Coopersmith reflected limited understanding of the test items by hearing impaired students.

There were no significant differences on the comparisons of gender differences using the Coopersmith and the McDaniel.
These results appear to be consistent with the theoretical approach of categorizing adjustment strategies of the hearing impaired (Meyerson, 1955). It supports Meyerson’s belief that the best adjusted life-style for the hearing impaired is the one which accepts both the world of the hearing impaired and the world of the hearing. The study of Sarfaty and Katz (1978) showed that the three school settings do not provide a complete answer for the adjustment problems of their hearing impaired students.

When Walker (1972) studied the effects of a resource room support program for mainstreamed children, she found no differences in the self-concepts of children receiving such services and those retarded pupils who remained in the self-contained special class programs.

Reich, Hambleton, and Houldin (1977) reported that there were no differences in self-esteem or social adjustment for 195 hearing impaired students in four programs which varied in their degree of integration.

I. Evaluation of the Language Levels of the Coopersmith

Mead (1934) contended that the acquisition of language is essential for the development of self, and if the language process poses problems for deaf individuals, it is probable that they lag behind their hearing peers in terms of the amount of information they have available upon which to base their self-image.

The teachers of the hearing impaired stated that their students had considerable difficulty learning the English language. That is, little attention was paid to areas of unique
linguistic development. In the past, researchers have concentrated on investigating the linguistic behavior of deaf children in terms of their skills in reading and writing. Even fewer researchers have provided reliable instruments for testing the language strengths and weaknesses of the hearing impaired child.

The Coopersmith has all current measures of self concept which are heavily language-based and they present low validity and reliability coefficients when used with hearing impaired children (chapter 3). It appears to measure self-concept adequately for them but is still not entirely appropriate. In a closer examination of specific types of comprehension problems, nearly all of the students had problems understanding negatives which were implied by comparisons and/or inferences. For example, many students were found to have overlooked the negative connotation of the items "I'm not doing as well in school as I'd like to.", "I really don't like being a boy-girl.", "There are many times when I'd like to leave home." And "Most people are better liked than I am."

Having examined individual scores and analyzing each item, interviews were held with previously selected students to determine their semantic understandings on certain test items on the Coopersmith. Upon examination of the test results, students with low scores were singled out. Then three students out of each class were interviewed. Idiomatic expressions were found to be a source of confusion for virtually all of the students who were interviewed. Consequently, such expressions as "give in", "make up my mind", "like to be called on", "pick on me",
"depended on", "pays much attention", "are pushing", and "not good enough" were not understood. In addition, the translation of written English into manual forms of expression was not always simple and direct. For example, the word "stick" was intended to mean "attack" but the deaf students associated the word with the branch from a tree or shrub.

One or more of the linguistic problems discussed above, namely subtle negative connotations, idiomatic expressions, and lack of direct correspondence affected one-third of the items. Moreover, examination of the Coopersmith revealed that nineteen of fifty-eight items on the complete test were characterized by at least one of the above linguistic difficulties, which include idiomatic (17 items) and negative structures (10 items). Rudner (1978) found that these kinds of sentence structures tend to produce bias against deaf respondents. This was similar to Garrison, Tesch, and DeCaro's (1978) study.

There was a semantic problem with the word "like". The word represented three different meanings: "same", "love", and "want". This was revealed during the interview discussions. Examination of the Coopersmith revealed that eight of the fifty-eight items use the word "like". This caused the subjects, who had language difficulties, a difficult time choosing which one of the three different meanings was to be used in the interpretation of the items. For example, in item #37, "I really don't like being a boy-girl", the only correct interpretation for the word "like" is "want". However, during the interview a number of the students interchanged it for "love".

II. Evaluation of the Self-Concept Measurements
In relation to self-concept, both Levine (1960) and Myklebust (1960) have suggested that the linguistic limitations of the deaf child may be detrimental to both social interaction and the development of self-identity. Beyond the particular circumstances of the parent-child interaction, Goffman (1963) argued that if individuals possess handicaps that carry with them negative social connotations, they may learn to regard themselves with the same negative connotations that society attributes to their handicaps. This is similar to the discussion of Coopersmith's lie items. Extending this same argument to research on deafness, Sussman (1973) investigated the self-concepts of a sample of deaf adults residing in the metropolitan New York City area. Sussman reported that negative perceptions of self frequently were associated with beliefs that hearing persons perceive the deaf in terms of defects, real or imaginary. Hence, while the quality of one's interactions with others may be viewed as critical to his or her concept of self, the individual's interpretation of social experience represents the actual foundation upon which that same concept is built.

In contrast to the views of Myklebust and Craig, Meadow (1968, 1969) attributed problems in personality development of deaf individuals to experiences of negative feedback from significant others. Fifty-eight deaf children of deaf parents were compared to a matched group of deaf children of hearing parents who, in Meadow's view, were more likely to react negatively to their child's disability. The children were students from all grades in a state residential school for the deaf. Meadow's hypothesis was supported by findings which showed
that children from homes with deaf parents and positive family climate obtained the highest scores on a self-image test devised for use with deaf children, and on teacher-counselor ratings of self-esteem and self-confidence. In comparison, deaf children of hearing parents and "lower" family climate were found to score lowest on these measures. These results provided evidence that the quality of interaction between the deaf child and his or her parents is related to the evaluational component of the self-concept, usually called self-esteem or self-regard. Meadow suggested further that the hearing parents' higher expectations for the deaf child's achievement may be the primary factor affecting the quality of the interaction between deaf children and hearing parents, as compared to deaf children and deaf parents.

Schlesinger and Meadow (1972) and Kennedy (1973) suggested that some factors affecting deaf children's positive resolution of the cases marking Erikson's (1959) stages of development may be: i) negative parental reactions to the child's deafness; ii) excessive parental restraint of the deaf child's actions; iii) difficulty in communication; and iv) estrangement from normally hearing peers and teachers. These factors are found among the institutionalized deaf who are isolated and insular. Their reactions to people are stereotyped and limited.

Thus, the question to be addressed in the present context would seem to be whether the self-concept of the deaf person differs in some qualitative aspects from that of the normally hearing person, or whether the observed differences reflect a developmental lag among the hearing impaired.
More recent research on the social self has suggested however, that self-appraisals are subject to the structure of the social situation. On this issue, Webster and Sobieszek (1974) wrote:

Black people, especially black school children, are often said to have low self-images, as if they carried this image around with them in all circumstances. From our point of view, such a claim is meaningless. Blacks may well have low expectations for their performance at certain tasks, such as schoolwork, and they may have low self-expectations by comparison with white school children; but until the task and the referent others are specified, the claim has neither meaning nor empirical support. There is a good deal of evidence that black children change their "self-image" considerably depending on which others they think they are being compared with, and there is at least a small amount of evidence that they have quite positive self-expectations for certain kinds of tasks. This is, of course, just what we would expect from a theory of expectation states; it is not explainable from a theory of a transsituational "self-image". What is surprising to us is that social psychologists would have to be reminded to "rediscover the primary group" (Page 163).

Thus, it may be fruitful in future research considerations of the development of the self-concept to operationalize constructs in a manner which simultaneously affords an analysis of the requirements of specific situations. This has been done in the field of deafness infrequently (Craig, 1965; Joiner et al., 1969).

In the area of programmatic interventions and self-concept enhancement, very little has been written focusing on the deaf individual. Kohl (1967) suggested that the encouragement of sign-language as an element of deaf cultural life may have enhancing effects upon the self-esteem of deaf persons. This position is similar to that of Sotomayer (1977), who observed that the native language instruction of ethnic minority groups
may foster the development of self-identity and self-confidence in school settings.

The understanding of the self-concept as a psychological construct offers a better understanding of the personality through a concern for the person and not the disability. The self-concept is a central and influential part of the person and an understanding of the self-concept is an opportunity to probe the greatest resources of rehabilitation, such as motivation, acceptance, and adjustment (Fitts, 1967).

Although the relationship may not be necessarily one of cause and effect, the self-concept does play a dominant role in influencing the adolescent’s goals, level of aspiration, and strivings. On the other hand agitations, disturbances, and blocks to learning or effective behavior do involve the self-concept. For the more specific implications in the area of the education of the hearing impaired, an understanding of the students’ strengths and weaknesses with regards to self-acceptance for example, can enable teachers, counsellors, parents, and all significant others to approach their job of accepting, understanding, and encouraging with greater courage, insight, and understanding. The school likewise in its efforts to foster the educational process for every child can benefit from the dimension of the personality that up until now has been ignored, viz., self-concept profile.

III. Problems in the Testing With Coopersmith

Most of the teachers of the hearing impaired reported that they found the testing sessions to be tedious and difficult. These teachers all had pupils who ranged from age 12 to 18 and
they indicated that most children had difficulty with the two columns of "Like Me" and "Not Like Me". This was reflected in the following comment from teachers:

The wording was not easy for them, e.g., "Like Me" and "Not Like Me" really confused the students. Just true or false would be better or yes and no. Most of the students found it hard to say for sure "Like Me" or "Not Like Me" and felt they wanted to say "Sometimes" to a lot of the questions.

The difficulty with the format of the Coopersmith (1967) self-esteem scale ("Like Me-Not Like Me" categories) is noted and it is suggested that in any future studies these categories be altered to "Yes-No" or "True-False" to see whether more valid responses may be obtained from the students.

IV. Implications for Further Research

Results of this investigation prompted the following suggestions for additional research: i. to replicate this study in the same educational settings but with different age levels, ii. to replicate this study in a setting where the mode of communication has been established for a substantial period of time, and iii. to replicate this study using a different set of behaviors related to expressive language and also with behaviors associated with social or academic self-concept.
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REFERENCES


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Appendix A

Coopersmith Self-Esteem Inventory
Please mark each sentence in the following way:

If the sentence tells how you usually feel, put a check (✓) under "LIKE ME".

If the sentence does not tell how you usually feel, put a check (✗) under "NOT LIKE ME".

There are no right or wrong answers.

**WARM UP EXERCISE**

<table>
<thead>
<tr>
<th></th>
<th>LIKE ME</th>
<th>NOT LIKE ME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I like ice cream.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I am happy.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I always play with older children.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I do not study hard at school.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I spend a lot of time daydreaming.</td>
<td>X</td>
</tr>
<tr>
<td>6.</td>
<td>I'm pretty sure of myself.</td>
<td>X</td>
</tr>
<tr>
<td>7.</td>
<td>I often wish I were someone else.</td>
<td>X</td>
</tr>
<tr>
<td>8.</td>
<td>I'm easy to like.</td>
<td>X</td>
</tr>
<tr>
<td>9.</td>
<td>My parents and I have a lot of fun together.</td>
<td>X</td>
</tr>
<tr>
<td>10.</td>
<td>I never worry about anything.</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I find it very hard to talk in front of the class.</td>
<td>X</td>
</tr>
<tr>
<td>12.</td>
<td>I wish I were younger.</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>There are lots of things about myself I'd change if I could.</td>
<td>X</td>
</tr>
<tr>
<td>14.</td>
<td>I can make up my mind without too much trouble.</td>
<td>X</td>
</tr>
<tr>
<td>15.</td>
<td>I'm a lot of fun to be with.</td>
<td>X</td>
</tr>
<tr>
<td>16.</td>
<td>I get upset easily at home.</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>LIKE ME</td>
<td>NOT LIKE ME</td>
</tr>
<tr>
<td>---</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>13.</td>
<td>I always do the right thing.</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I'm proud of my school work.</td>
<td>X</td>
</tr>
<tr>
<td>15.</td>
<td>Someone always has to tell me what to do.</td>
<td>X</td>
</tr>
<tr>
<td>16.</td>
<td>It takes me a long time to get used to anything new.</td>
<td>X</td>
</tr>
<tr>
<td>17.</td>
<td>I'm often sorry for the things I do.</td>
<td>X</td>
</tr>
<tr>
<td>18.</td>
<td>I'm popular with kids my own age.</td>
<td>X</td>
</tr>
<tr>
<td>19.</td>
<td>My parents usually consider my feelings.</td>
<td>X</td>
</tr>
<tr>
<td>20.</td>
<td>I'm never unhappy.</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I'm doing the best work that I can.</td>
<td>X</td>
</tr>
<tr>
<td>22.</td>
<td>I give in very easily.</td>
<td>X</td>
</tr>
<tr>
<td>23.</td>
<td>I can usually take care of myself.</td>
<td>X</td>
</tr>
<tr>
<td>24.</td>
<td>I'm pretty happy.</td>
<td>X</td>
</tr>
<tr>
<td>25.</td>
<td>I would rather play with children younger than me.</td>
<td>X</td>
</tr>
<tr>
<td>26.</td>
<td>My parents expect too much of me.</td>
<td>X</td>
</tr>
<tr>
<td>27.</td>
<td>I like everyone I know.</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>I like to be called on in class.</td>
<td>X</td>
</tr>
<tr>
<td>29.</td>
<td>I understand myself.</td>
<td>X</td>
</tr>
<tr>
<td>30.</td>
<td>It's pretty tough to be me.</td>
<td>X</td>
</tr>
<tr>
<td>31.</td>
<td>Things are all mixed up in my life.</td>
<td>X</td>
</tr>
<tr>
<td>32.</td>
<td>Kids usually follow my ideas.</td>
<td>X</td>
</tr>
<tr>
<td>33.</td>
<td>No one pays much attention to me at home.</td>
<td>X</td>
</tr>
<tr>
<td>34.</td>
<td>I never get scolded.</td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>I'm not doing as well in school as I'd like to.</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>LIKE ME</td>
<td>NOT LIKE ME</td>
</tr>
<tr>
<td>---</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>36.</td>
<td>I can make up my mind and stick to it.</td>
<td>X</td>
</tr>
<tr>
<td>37.</td>
<td>I really don't like being a boy - girl.</td>
<td>X</td>
</tr>
<tr>
<td>38.</td>
<td>I have a low opinion of myself.</td>
<td>X</td>
</tr>
<tr>
<td>39.</td>
<td>I don't like to be with other people.</td>
<td>X</td>
</tr>
<tr>
<td>40.</td>
<td>There are many times when I'd like to leave home.</td>
<td>X</td>
</tr>
<tr>
<td>41.</td>
<td>I'm never shy.</td>
<td>0</td>
</tr>
<tr>
<td>42.</td>
<td>I often feel upset in school.</td>
<td>X</td>
</tr>
<tr>
<td>43.</td>
<td>I often feel ashamed of myself.</td>
<td>X</td>
</tr>
<tr>
<td>44.</td>
<td>I'm not as nice looking as most people.</td>
<td>X</td>
</tr>
<tr>
<td>45.</td>
<td>If I have something to say, I usually say it.</td>
<td>X</td>
</tr>
<tr>
<td>46.</td>
<td>Kids pick on me very often.</td>
<td>X</td>
</tr>
<tr>
<td>47.</td>
<td>My parents understand me.</td>
<td>X</td>
</tr>
<tr>
<td>48.</td>
<td>I always tell the truth.</td>
<td>0</td>
</tr>
<tr>
<td>49.</td>
<td>My teacher makes me feel I'm not good enough.</td>
<td>X</td>
</tr>
<tr>
<td>50.</td>
<td>I don't care what happens to me.</td>
<td>X</td>
</tr>
<tr>
<td>51.</td>
<td>I'm a failure.</td>
<td>X</td>
</tr>
<tr>
<td>52.</td>
<td>I get upset easily when I'm scolded.</td>
<td>X</td>
</tr>
<tr>
<td>53.</td>
<td>Most people are better liked than I am.</td>
<td>X</td>
</tr>
<tr>
<td>54.</td>
<td>I usually feel as if my parents are pushing.</td>
<td>X</td>
</tr>
<tr>
<td>55.</td>
<td>I always know what to say to people.</td>
<td>0</td>
</tr>
<tr>
<td>56.</td>
<td>I often get discouraged in school.</td>
<td>X</td>
</tr>
<tr>
<td>57.</td>
<td>Things usually don't bother me.</td>
<td>X</td>
</tr>
<tr>
<td>58.</td>
<td>I can't be depended on.</td>
<td>X</td>
</tr>
</tbody>
</table>
Appendix B

Letter to Professionals
Appendix C

McDaniel Self-Concept Scale
DIRECTIONS
You are asked to describe your perception of a student's self-concept in terms of the following items. Please indicate your rating on each item by circling one of the five numbers at the right of each item.

1. Enjoys working with others. For example, student may smile, laugh, or look pleased when engaged in productive group activity

2. Exhibits self-confidence. For example, student initiates activities, goes ahead in work and play without direction

3. Plays with smaller or younger children. For example, student seeks simple play activities in order to excel or dominate peers

4. Evidences strong pleasure in good work. For example, student voluntarily redoes poor or sloppy constructions, paperwork, coloring, etc. unless he is satisfied (may smile, chuckle, sigh, look pleased) with his product

5. Is antagonistic to adults. For example, student talks back, refuses to obey, balks in the presence of adults

6. Has unrealistic expectations for himself. For example, student sets minor and/or major goals, academically and/or physically, which he is incapable of attaining

7. Is easily discouraged. For example, student ceases activity when minor failure or mishap occurs

8. Appears unsociable. For example, student plays and works alone. He may leave setting or activity when others join him

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9. Cries easily. For example, student “puckers up” or tears come to his eyes when he has a mishap, failure, or difficulty with activity (work or play) or with interpersonal relationships

10. Is unfriendly to classmates. For example, student works and plays alone. He leaves activity when others appear and refuses (with words or gestures or looks) friendly overtures

11. Tries to dominate or bully. For example, student attempts to lead activities even though this is counter to desires of group. He attempts to force his wishes, verbally and/or physically on others

12. Fights

13. Talks compulsively. For example, student does not await his turn, nor stop talking when his turn is over. He has to “have his say” to peers and adults

14. Seems afraid of teacher. For example, student never disagrees with teacher. He does not voluntarily speak up or perform and seems to withdraw physically from any contact with teacher

15. Feels he is “picked on” by classmates. For example, student claims others treat him “unfairly.” He claims they make him do more “work” (and have less “fun”)

16. Gives up easily. For example, student meets difficulty or mishap with work or play by ceasing activity

17. Is defiant. For example, student rejects criticism. He may do so verbally (sass) and/or nonverbally (tear up work, destroy game, disrupt group activity, fight)

18. Thinks he is right. For example, student does not seek verification of his procedures in work or play. He proceeds when his own goal is satisfied...

19. Is ready to accept blame when at fault. For example, student does not try to shift accusations or rebukes to others for his actions

20. Is trusting. For example, student has unquestioning reliance in statements, actions, and justice of others. He is not suspicious of their motives

21. Seems to have a “chip” on his shoulder. For example, student misinterprets expressed thoughts, motives, and actions of others in both work and play as being opposed to his best interests

22. Is quarrelsome or argumentative. For example, student may taunt others and/or disagree with the statements of others

23. Is “oversensitive.” For example, student may cry or withdraw or become silent when his statements or actions are questioned

24. Provokes hostility from classmates. For example, student may tease others and/or disagree with statements by others. He may do these things verbally or non-verbally

25. Thinks his teacher likes him. For example, student acts happy (may smile, work, or play as if contented) when in presence of teacher

26. Tattles. For example, student tells teacher of statements and actions which were not intended for teacher to know about

27. Is withdrawing. For example, student does not play and/or work with peers

28. Is fearful. For example, student backs away or withdraws from routine activities (work and/or play) where he could be hurt, or where he might undergo stress or be embarrassed

29. Seems satisfied with level of performance. For example, student does not withdraw from work and/or play situations and appears visibly to be content

30. Appears worried. For example, student may have an anxious “look” (i.e., furrowed brow, “cowed” expression)

TOTAL SCORE = [ ]
Appendix D

Biographical Data Sheet
Biographical Data Sheet

I. General Information
1. Student I.D. #
2. Gender _____ Male  _____ Female
3. Date of Birth
4. Type of Education (Check one):  _____ Regular class with help
   _____ Class for hearing impaired
   _______ in regular school
   _____ Jericho Hill off-campus
   _____ Jericho Hill School
5. How long has this student been receiving
   this type of education: _______________________
6. What other types of education has the student
   received: _______________________

II. History
1. Parent(s) (Check one): a) _____ 2 parents family
   _____ single parent
   b) Is the student living with his/her
      parent(s) ______
      (if not, please explain)____________________
2. Number of children in family
3. Birth order
4. Socio-economic background (Check one):
   _____ parent(s) earn more than $25,000
   _____ parent(s) earn more than $15,000
   _____ parent(s) earn less than $15,000

III. Characteristics of teacher
1. Teacher I.D. #
2. Age
3. Length of training (Check one or more):
   _____ B.Ed.  _____ M.Ed.  _____ Diploma of Education of the Deaf
   _____ B.A.  _____ M.A.  _____ Others (please specify)
4. Length of teaching
5. Attitude toward "integration"  1  2  3  4  5
   (Put a circle around the response number)
Appendix E

Letter to Directors of Special Education
and Principals of the Schools
Appendix F

Letter to Study Coordinators
Dear

Thank you very much for your letter of April 12, 1979 regarding your approval of my study.

Enclosed are 10 Coopersmith Self Esteem Inventory Tests for each hearing impaired pupil, and 10 McDaniel Inferred Self Concept Scales along with the Biographical Data Sheets for the teachers of the hearing impaired.

It would be appreciated if you would please distribute the enclosed parental consent forms as indicated for the hearing impaired students attending your school. Parents are asked to complete these forms and send them in the stamped return envelopes directly to me at my home address. Only those students whose parents indicate their approval will be asked to participate in individual testing sessions which will be conducted during school time.

For Coopersmith Self Esteem Inventory, it is important that the students understand the items. If a student cannot understand an item, then any means of communication (oral, cued speech, or total communication) may be used to clarify its meaning.

The subjects form a British Columbia population which meets the following criteria:

1) Has reached the 12th but not the 18th birthday and is attending a Public School or School for the Deaf in British Columbia on January 1, 1979.

2) Has greater than 74 decibels (dB).

3) Is capable of completing a pencil and paper test.

4) Has had the hearing loss since birth or prior to two years of age.
Appendix G
Letter to Parents
CONSENT FORM

I ____________________________ hereby grant my permission to have my child participate in the self concept study of hearing impaired students.

I ____________________________ refuse permission to have my child participate in the self concept study of hearing impaired students.

Signature: ______________________
(Parent or guardian)

Date: _________________________
Appendix H

Letter of Thanks